## 

### (2) Multimedia Management

- Music classification
- Corner detection etc.
- Others:

### (3) Compression and Digital Video

- CAST
- Grafit
- JADE
- Others (please add):

#### (3) Compression and Digital Video

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• Others (please add):

OTHER ??

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#### **INVENTION DISCLOSURE**

PAGE ONE OF

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instructions: The information contained in this document is COMPANY CONFIDENTIAL and may not be disclosed to others without prior authorization. Submit this disclosure to the HP Legal Department as soon as possible. No patent protection is possible until a patent application is authorized, prepared, and submitted to the Government.

	authorized, prepared, and submitted to the Government.
ĺ	Descriptive Title of Invention: Photo quality meter
	Name of Project: N/A
	Product Name or Number: N/A
	Was a description of the invention published, or are you planning to publish? If so, the date(s) and publication(s):
l	No
I	Was a product including the invention announced, offered for sale, sold, or is such activity proposed? If so, the date(s) and location(s):
I	No
	Was the invention disclosed to anyone outside of HP, or will such disclosure occur? If so, the date(s) and name(s):
	No
	If any of the above situations will occur within 3 months, call your IP attorney or the Legal Department now at 1-898-4919 or 970-898-4919.
	Was the invention described in a lab book or other record? If so, please identify (lab book #, etc.)
	No
I	Was the invention built or tested? If so, the date:
	<b>№</b> 0
	Was this invention made under a government contract? If so, the agency and contract number:
	$\mathcal{N}$ o
-	Description of Invention: Please preserve all records of the invention and attach additional pages for the following. Each additional page should be signed and dated by the inventor(s) and witness(es).
	A. Description of the construction and operation of the invention (include appropriate schematic, block, & timing diagrams; drawings; samples; grat
	flowcharts; computer listings; test results; etc.)
	B. Advantages of the invention over what has been done before.
	C. Problems solved by the invention.

Write in Dark Ink on Front Side Only, Please

Signature of Im	ventor(s): Pursuant to my (our) emp	lcyment agreement, I (we) subi	mit this disclosure on this date: (	1-
Employee No. 26877	Name 2 Q/AN LIN	Signature  Clian Li	Tetnet Mailstop	Entity & Lab Name
Employee No.	Name	Signature	Teinet Mailstop	Entity & Lab Name
Employee No.	Name	Signature	Telnet Mailstop	Entity & Lab Name
Employee No.	Name (If more than four inventors, include	Signature additional information on anoth	Tetnet Mailstop ner copy of this form and attach to this doc	Entity & Lab Name sumera)

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INVENTION DISCLOSURE	COMPANY CONFIDENTIAL	PAGE	OF
Signature of Witness(es): (Please by to obtain the s	signature of the person(s) to whom invention was first disc	iosed.)	_
The invention was first explained to, and under	erstood by, me (us) on this date: [		
Full Name	Signature	Da Mari	te of Signature
AMIR SAID			
Full Name	Signature	Da	te of Signature
Inventor 9 Name Address Informations as			
inventor & Home Address information: (# a	tore than four inventors, include addit information on a cop	py of this form & attach to	mis document)
Inventor's Full Name			
QIAN LIN			
Street			
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Santa Clara		State	25 95051
	OR.	CA.	
Do you have a Residential P.O. Address? P.O. BOX	City	State	ZIp
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Inventor's Full Name			
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Description of Invention: Please preserve all records of the invention and attach additional pages for the following. Each additional page should be signed and dated by the inventor(s) and witness(es).

- A. Description of the construction and operation of the invention (include appropriate schematic, block, & timing diagrams; drawings; samples; grap flowcharts; computer listings; test results; etc.)
- For each photo captured by a digital camera, will calculate a photo quality number that consist of the following components: sharpness (whether the photo is blurry); composition (whether the main object of the photo follows composition rules in photography); color (whether there is large saturated region or significant color rast); rad eye or closed eye, noisy (due low light, eg.)
- Currently, there is no photo quality number associated with a digital photo. One needs to view a large screen image to determine whether the captured image is good or not. This can be slow in a PC (a thumbnail sheets is much lester than one-byone examination), or impossible on a small LCD screen. The photo quality meter will give the camera user instant feedback on
- how good the photo is. C. Problems solved by the invention.

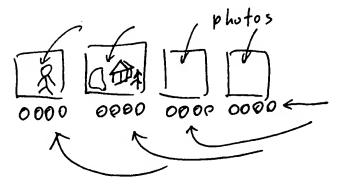
The Photo quality meter can give users instant feedback on how good their captured photos are so that they can make @quick decisions (e.g. delete and retake, keep, print, send to photo-Sharing web site). They don't have to wait until downloading the photos to a large - Screen monitor to examine closely.

D. Prior solutions and their disadvantages (if available, attach copies of product literature, technical articles, patents, etc.).

- - There are a lot of image quality studies published in literature. But they are used by researchers and designers, and are not calculated on each captured photo and presented to consumers. A camera with built - in photo quality meter can help consumers make better decisions about their captures and re-take, or keep).

Form 3.1 idf.doc, rev. 06/03/00

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Coded indicators

On how good the photo

15 in terms of sharpness

noise level, composition,

etc.